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ABSTRACT

This qualitative study investigated how 11 full-time university faculty members planned live instruction for adult learners in a telecommunications-based distance education setting. All of the subjects had taught the same courses in a traditional setting and had experience teaching distance courses. Students at 8-11 sites in Utah and Colorado were linked with live instruction from a classroom at a state university in Utah. Instruction was delivered via two-way audio and one-way still image video signals via telephone lines; daily UPS deliveries were used for the submission and return of assignments and tests. Data were collected via semi-structured interviews, observation of class sessions in the originating classroom, and analysis of planning documents and journals prepared by the teachers. Three features were found to characterize the preactive planning process: (1) faculty engaged in course or term planning as a front-end activity; (2) planning was driven by content and centered on the selection and sequencing of subject matter; and (3) distance planning focused on the development of an extended syllabus. Factors that influenced planning included time constraints; the medium of delivery; and faculty beliefs, attitudes, and concerns about the nature and conduct of instruction. It is noted that the resulting courses were retrofitted rather than redesigned, and the paper concludes by suggesting that differences between face-to-face instruction and the distance education environment should be taken into account when planning for instruction in non-traditional settings with non-traditional learners. (25 references) (BBM)

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A QUALITATIVE STUDY OF TEACHERS' PLANNING
OF INSTRUCTION FOR ADULT LEARNERS
IN A TELECOMMUNICATIONS-BASED
DISTANCE EDUCATION ENVIRONMENT

by

Linda L. Wolcott, Ed.D.

According to Schön (1983), the context for much of today's professional practice constitutes "not problems to be solved, but problematic situations characterized by uncertainty, disorder, and indeterminacy" (p. 15-16) in which "problems do not present themselves to practitioners as givens" (p. 40). Teaching at a distance presents educators with such a unique situation of practice.

With the growth of telecommunications technology, distance education has entered a new generation. Today, degree programs, training, and continuing professional education are often delivered to adult learners by telecommunications technologies such as telephone, television, computer, and satellite. These media allow learners who are physically separated from their instructor, and often from one another, to transcend geographical distance. By providing for real-time participation and immediate two-way interaction among participants, the application of these telecommunications media creates a unique form of instruction and a unique situation of practice.

Distance instruction differs contextually from traditional classroom instruction. Mediating instruction via telecommunications technology to overcome physical distance alters both the interpersonal and instructional communications processes. Consequently, the "joint activities of teaching and learning at a distance raise a completely new set of problems" (Sparkes, 1983, p. 183). One such "problem" often confronting distance teachers is that of designing instruction for adult learners.

Faced with new delivery technologies, altered teaching environments, and changing student demographics, distance teachers must "accomodate [sic] a number of variables which are not normally encountered" (Carter, 1982, p. 6) in designing instruction for more conventional settings. Planning instruction for a distance context becomes problematic. Those who design and present instruction for telecommunicated distance delivery to adults face new

challenges in designing instruction to assure that desired outcomes are achieved.

This study addressed the lack of an understanding drawn from practice of how teachers of college and adult students design instruction for live, telecommunicated delivery. Given that teachers do not apply prescriptive planning models (Morine-Derheimer & Vallance, 1976; Neale, Pace & Case, 1983; Peterson, Marx & Clark, 1978; Sardo, 1982; Taylor, 1970; Yinger, 1977; Zahorik, 1975), what constitutes planning for distance instruction for adult learners? What constructs and rules guide distance teachers in designing instruction in a complex and uncertain practice setting?

The purpose of this study was to describe the preactive instructional planning of university faculty teaching adult learners at a distance. Four questions shaped the course of the study:

1. What is the nature of teachers' planning?
2. What instructional considerations most concern distance teachers as they plan?
3. What are the major factors that influence teachers in planning distance instruction in their particular setting?
4. What rules of action governing planning can be inferred from teachers' self-reports of planning and from observations of their implemented plans?

Theoretical Foundation

Jackson (1968) distinguished two components of teaching: interactive and preactive teaching. Interactive teaching refers to those phases when the teacher is working directly with the students. Preactive teaching occurs prior to and after interactive teaching when teachers are engaged in activities such as preparing lessons, selecting instructional materials, or evaluating students' performance. During both of these component phases, teachers plan. Instructional planning is an important aspect of the practice of teaching (Romberg, 1980). In planning at the preactive level teachers set their direction, their course of action. Teachers make decisions about what to teach and how to teach it.

Research in the relatively new area of teacher planning (see Clark & Peterson, 1986; and Shavelson & Stern, 1981) provides insights into how teachers in elementary schools plan. However, the literature tells us little about how teachers of college and adult students plan. Studies are only beginning to examine the instructional planning process in which teachers of

college students engage (Andresen et al., 1985; Dinham, 1989; Powell & Shanker, 1982; Stark et al., 1988). Planning for non-traditional learners and environments is uncharted territory.

Unfortunately, the technical/professional knowledge of practice may not provide sufficient guidance for those designing distance instruction (Sparkes, 1983). Further, the literature that pertains to designing instruction to be delivered live at a distance is deficient. While offering practical suggestions and recommendations, the literature fails to provide data-based and conceptually-linked design prescriptions to inform practice. Given these inadequacies, practitioners must look to their own reflective practice.

Professionals, in general, hold implicit theories of practice through which they make sense of complex, divergent situations (Argyris & Schön, 1974). Research in the emerging area of teachers' thinking (see Clark & Peterson, 1986) documents that teachers, as professionals, possess tacit understandings of their roles, their students, and the processes of instruction that guide their practice (Conners, 1978; Elbaz, 1981; Fox, 1983; Marland, 1977; Munby, 1983). However, researchers have not as yet identified rules of action that derive from examining the practice of instruction as it is planned and delivered by telecommunications in a distance context. It remains unknown how faculty, when faced with the uncertain and divergent situation of distance teaching, construct their planning/design practice as a problem that they can solve.

Methods

This study was framed as a qualitative study that described how distance teachers planned instruction for adult learners in a telecommunications-based distance education setting. Planning was examined within the context of instruction that takes place live, is mediated by telecommunications technology, and serves an adult audience.

Participants

Eleven full-time university faculty members who were teaching credit courses at a distance participated in the study. All participants had prior experience in or preparation for teaching at a distance, and had reputations as good teachers. The faculty were teaching courses that were part of the standard curriculum and that they had taught previously in a face-to-face setting. The majority of the students

enrolled in the course were adult learners. A profile of participating faculty is presented in Table 1.

Setting

The distance education program linked students at sites located in the states of Utah and Colorado with live instruction originating from a classroom at a state university in Utah. From eight to eleven remote receive sites were connected by telecommunications technology to one of two distance classrooms at the origination site.

Instruction was delivered by audio-graphic media that involved the transmission of two-way audio and one-way still image video signals via telephone lines. Audio communication was facilitated by the use of push-to-talk microphones. Communication of visual images was accomplished in several ways. Both originating classrooms had the capacity to transmit still video (slow-scan/freeze-frame) images of the instructor, of writing on the board, or of a prepared visual such as an overhead transparency. Classroom A used an electronic blackboard to transmit real-time writing; Classroom B was equipped with an Optel writing tablet that also enabled the transmission and annotation of previously stored graphics. As many as eleven sites widely dispersed over the two states depended on daily UPS deliveries for the submission and return of assignments and tests.

Data Collection

Data were collected over the course of the winter and spring quarters of 1990. Three data collection methods were applied: interview, observation, and document analysis. The primary method of data collection was semi-structured interviewing. Each of the faculty members was interviewed twice during the quarter in which s/he was teaching. The interviews emphasized the process of planning instruction. Questions were structured around three general themes: the activities of planning; instructional concerns considered during planning; and influences that affected planning. Each interview was audio-taped and subsequently transcribed into an interview log for analysis.

Second, the researcher directly observed at least two class sessions conducted at a distance by each of the faculty interviewed. Since the phenomenon of planning could not be observed directly, observation sought to derive a sense of context for which instruction was planned. All observations were conducted in the originating classroom. The researcher made detailed field notes, focusing on both instructional presentation and dynamics.

Table 1
Research Participants

Participant	Department	Rank	Distance Teaching. Exp.	Type of Course	Class-room	Number of Sites	Number of Students
1	Psychology	Assoc. Prof.	Veteran	Lower Div.	A	11	50
2	Anthropology	Professor	Veteran	Upper Div.	B	7	18
3	History	Professor	Veteran	Upper Div.	B	10	37
4	Business	Professor	Veteran	Upper Div.	A	10	66
5	English	Professor	New	Upper Div.	B	8	46
6	Education	Asst. Prof.	Veteran	Graduate	B	9	45
7	English	Asst. Prof.	New	Upper Div.	B	7	18
8	Economics	Assoc. Prof.	Veteran	Graduate	B	7	18
9	English	Assoc. Prof.	Veteran	Upper Div.	B	9	39
10	Philosophy	Assoc. Prof.	Veteran	Upper Div.	B	5	35
11	Business	Professor	Veteran	Lower Div.	A	9	34
Average						8	37

Teachers' Planning 5

The third means of data collection was the analysis of documents pertaining to instruction as planned by the participating teachers. The researcher collected two types of documents from the participants: (1) pre-existing planning documents such as lesson plans, presentation outlines, or course syllabi, and (2) a journal generated specifically for the study.

Data Analysis

In analyzing the data, the researcher applied the constant comparative method of data analysis. Constant comparison involved coding, categorizing, and theorizing about the data. Data from each interview, observation and document were coded to yield descriptive and interpretive categories that were compared with data collected subsequently. As data were compared, categories were merged or revised, and properties of those categories were developed. The final phase in the constant comparative method involved theorizing, that is, finding relationships among the categories.

To facilitate the handling of large amounts of text data, QUALPRO, software designed expressly for the management of qualitative data, was used. The program worked in conjunction with word processing software, (in this case WordPerfect 5.0), to store, code, organize and manipulate text files.

Findings

The results of data analysis describe the process in which faculty engaged when planning, the major factors that influenced planning, and the teacher-held principles--implicit rules of action--that faculty applied in planning. Table 2 summarizes the categories of data analysis and their respective properties as described below.

The Nature of Planning

Three features characterized the preactive planning process: (1) faculty engaged in course or term planning, (2) planning was driven by content, and (3) distance planning focused on the development of an extended syllabus.

Term planning. When designing distance instruction, the participants approached the task by planning at the course or term level. Planning took the form of a time-consuming, front-end activity rather than an ongoing one. Looking at the big picture, the faculty saw their course of action laid out over the duration of the quarter. They concentrated their planning efforts on making the majority of their

Table 2

Summary of Findings

The Nature of the Planning Process

- . Term planning
- . Driven by content
- . Focused on syllabus development

Factors that Influence Planning

- . Constrained by time
- . Restricted by the medium
 - . Lack of visual communication
 - . Physical separation
 - . Technical obstacles
 - . On-site students
 - . Lag time

Implicit Rules of Action

- . Cover the material
- . Maintain control
- . Go with the flow
- . Provide an equitable learning experience

instructional decisions up front where the course was essentially packaged in an extensive syllabus prior to the beginning of the term. There was little day-to-day lesson planning.

In planning the course, the participants were concerned, first, with defining the content and, second, with matching the content with the time available in which to teach it. These two tasks were embedded in the larger, central planning activity, the development of the course syllabus.

How to present content went largely unplanned. By their own admission, faculty were secondarily concerned with methodology, as evidenced by the lack of written planning documents other than the syllabus and by the absence of procedural plans within the syllabi themselves.

Driven by content. To these distance teachers planning instruction meant planning content. Participants centered on the selection and sequencing of the subject matter. In both the decisions they made and in the planning documents they produced, the faculty focused on content--that "set of information" that one selected "to cover". While a few participants mentioned considering factors such as the characteristics of their "audience", or the influence of logistical and technical constraints on instruction, it was a preoccupation with what to teach that drove the instructional design of the course.

In planning the course, two dependent tasks dominated: determining "what to cover", and matching content with the time available in which to cover it. Determining what to cover consisted of identifying the concepts and setting goals and/or objectives. Defining content was a process of giving shape to an amorphous body of knowledge.

Faculty asked themselves the "what" questions that gave shape to the content: "What's the course for?"; "What do I really want students to accomplish at the end of this class?"; "What are the abstractions that they have to understand?"; "What's important and what's kind of frosting on the cake?"

The second planning task, matching content, involved establishing the order of coverage and fitting content to the given time frame. Matching time and content meant "equat[ing] the time you have available to the material you want to cover." Once they defined the relevant content, typically in a topic outline or lecture notes, the faculty fit or matched it to the blocks of time available.

Focused on syllabus development. Decisions about content were packaged in an extensive syllabus prior to

the first meeting of the term. The syllabus embodied the planning decisions and captured them in a tangible form. As one participant described it, "developing the syllabus is where it's at. . . Any course you've taught for a while has its shape in your head, and the syllabus is nothing more than giving it form, a concrete form." Developing a syllabus was the focal point of distance planning.

To call this central planning document a syllabus is misleading; for in most cases, the syllabus was far more extensive than the traditional one- or two-page handout. It was commonly referred to as the "expanded", "enhanced", or "extended" syllabus, and in its extension, the syllabus was unique.

The extended syllabus had as its base the traditional class syllabus which typically contained items such as a course description; listings of goals, readings and assignments; a topic outline; and grading policies. In addition to these standard items, the syllabi also contained handouts or hard copies of visual materials, study questions, reprinted articles, or extensive essays. Syllabi varied widely in length, contents and format. A summary of syllabus contents is presented in Table 3. It was the marriage of the standard document with expanded lecture notes and supplemental materials that gave birth to the new expanded form that was predominantly a content document.

The syllabus served several purposes. First, it was designed to support the semi-independent learning of the students. Since most distance classes met less frequently, and some for shorter periods of time than those which met on campus face-to-face, an enhanced syllabus compensated for the loss of contact hours. Particularly for those distance students who did not have ready access to the instructor or to a peer learning group, the syllabus was a valuable aid that directed their thinking and learning.

Providing an enhanced syllabus also economized instructional time: "Because the syllabus is so much beefier in terms of reading material and exercises that I normally expect in an on-campus course, than I can actually reduce the amount of lecture time." The syllabus was, at the same time, as much a study guide for students as it was a master plan for the instructor. A number of faculty used the syllabus as a presentation outline relying on its organizational structure to guide their lectures. In class, the syllabus served as "a point of departure for discussion" from which the teacher and the students could "flesh out the details by talking together.

Table 3
Syllabus Contents

Participant	Features																		length of syllabus pp.	Special Features	
	course description	course goals	topic outline / schedule	reading assignments	assignment description	grading policy	textbook	address / phone no.	office hours	lesson objectives	content narrative	articles / readings	study questions	optional reading list	handouts / hard copies	glossary	vocabulary lists	exercises			"how to study" tips
1		x	x	x		x	x	x	x				x		x		x			89	
2		x	x	x	x		x	x		x	x			x				x		46	session outline
3	x	x		x	x	x	x	x			x		x				x	x	x	77	
4		x	x	x		x	x	x	x			x			x					28	
5	x	x	x	x	x	x	x	x	x		x	x		x		x			x	61	
6	x	x	x	x	x	x	x		x	x	x	x			x					136	session outline
7	x	x	x	x		x	x	x	x	x	x	x	x		x				x	267	sample quiz
8	x		x	x	x	x	x	x						x						3	
9			x	x	x	x	x	x	x	x	x		x		x				x	30	
10	x	x	x	x		x	x	x		x	x	x		x	x	x			x	156	illustrated biographical sketches space for notes outlines of arguments solutions to problems
11			x	x		x	x								x		x	x		33	

Producing the syllabus also represented professional development. Syllabus development was time-consuming and called for reflecting on customary approaches to teaching, as a veteran distance teacher observed: "I don't know of anybody who sits down and thinks through a class the way this system makes you think through it to crank out a sixty or seventy page syllabus."

Developing the syllabus had a reciprocal effect on instruction. An interesting spin-off of this central planning activity was that a number of faculty used the extended syllabus with subsequent sections of the same course taught entirely in a face-to-face setting. Additionally, faculty reported that the extra planning efforts of producing the syllabus paid off in improved teaching.

But developing and working from an extended syllabus had an important drawback. Faculty reported feeling "tied to the syllabus". On the one hand, an extended syllabus gave the course its structure and laid out its direction. Yet once written, the syllabus became, in effect, a contract leaving little room for spontaneous deviation. Faculty felt locked in to following the syllabus, and consequently, less free to be flexible or spontaneous.

Factors That Influenced Planning

Designing distance instruction was subject to the influence of factors in the teaching and learning environment. Two attributes of the distance setting, time and the medium of delivery, defined the context in which the instruction would take place. These two contextual factors influenced teachers in planning their instructional course of action, and affected the outcome of planning.

Constrained by time. Time was a significant factor in designing distance instruction. Typically, there were fewer contact hours for the distance taught courses than for the same course offered on campus. The humanities courses, for example, met once a week for two hours when the comparable on-campus course met for one hour four times a week. Teaching in this distance program meant working within a compacted or condensed time frame in which faculty expected to cover the same material but in less time.

Accommodating a foreshortened time frame involved both compromise and dilemma. Time constraints had the effect of diminishing spontaneity. Given the fewer contact hours coupled with the brevity of the quarter system, most faculty expressed a sense of urgency in accomplishing their goals. In classrooms, the atmosphere was often tense as participants felt "up

against the clock", particularly when technical or logistical difficulties further robbed them of instructional time.

Participants often spoke of time as a luxury. Contrasting distance teaching to face-to-face teaching, participants noted that in the distance context, time was a precious commodity to be judiciously consumed. Deviating from planned content or permitting the instructional exchange to develop unencumbered constituted a luxury they could not afford.

Restricted by the medium of delivery. In their planning, the participants were also influenced by the medium of delivery. The medium had the effect of restricting what the teacher could plan to do, both because of how the system was configured, and because of the logistical challenges such a configuration posed. It was common in journal entries for the writers to vent their irritation with logistical and technical obstacles and interruptions that frustrated their plans. Likewise, conversations with participants invariably touched upon problems and annoyances associated with the mechanics of the program that impinged upon what an instructor planned or would have planned to do.

Five dimensions of the medium and its delivery emerged as challenges to designing distance instruction.

(1) the lack of visual communication - The inability to see the students during instruction was perceived as a major "electronic barrier" to instructional communication that impeded feedback, rapport, and interaction. Without the return video, the participants felt that the amount of feedback they were able to provide and, more important, receive from students decreased significantly. Trying to teach without seeing students was tantamount to "teaching in a vacuum", a prospect that caused anxiety in most faculty who had come to depend on feedback to direct the flow of instruction.

Coincidentally, without the opportunity to make eye contact and to gather feedback, teachers had the tendency to refer to students as "faceless people", "invisible faces", or collectively and impersonally as "out there." They found it difficult "to build a rapport with the class if you can't reach out and touch them" or "to demonstrate personal interest in them when they're a voice out of a black box." The faculty also felt that lacking visual communication, students were less likely to engage in instructional dialogue with them and other students they could not see. And,

indeed, only rarely was student-to-student interaction observed.

(2) physical separation - Much the same was said with regard to the second challenge, the physical separation of learners. The amount of interaction among students and between the students and the teacher was reduced along with the spontaneity of such dialogue. Participants compared the dynamics between conventional and distance settings: "When you have an on-campus group, they work off of each other. . . The [distance] students [are] without that kind of interaction in the class."

Again, rapport was hindered as teachers found it difficult to get to know the students, and for the students to get to know students other than those with whom they shared a site. Teaching and learning at a distance represented not only physical distance among those involved, but also "psychic distance".

(3) technical obstacles - The configuration of the system and technical difficulties often associated with its implementation affected the dynamics of instruction, and the use of instructional materials. Problems with equipment or transmission could lessen the teaching value of the instructional material, or at worst, render a particular instructional material useless. Technical failures were particularly troublesome, for they broke the "flow" or natural development of planned instruction and spontaneous discussion. Interruptions represented "a pause in the discussion. . . a mental pause for me".

Frustrations with the implementation of instructional materials discouraged their use. While teaching at a distance begged instructors to "think visually", the realities prompted faculty to ask whether investing time and energy in planning for the use of visuals was worth the effort.

(4) on-site students - The presence (or absence) of students at the origination site posed a fourth challenge to design. The majority of participants preferred to have students in the originating classroom. In addition to providing a personal dimension that many found essential to their teaching style, "real people to whom I could relate" contributed a critical element to the dynamics of instruction. Teachers relied on the face-to-face students to provide them with feedback about their teaching performance and to "gauge" the students' comprehension. Without the feedback provided by "the presence of warm bodies in front of you. . .", "it becomes really, really easy just to lecture". Though they preferred to have some students present, the participants acknowledged an

inherent risk: the tendency to teach to the students they could see and with whom they could directly interact.

(5) lag time - A fifth influence on design was logistical, and partly bureaucratic. A major challenge existed in overcoming "lag time" between the receipt and redistribution of assignments and tests. Configured to accommodate one-way video and two-way audio, alternative means were required for the exchange of printed materials. Options such as facsimile were costly and its frequent use discouraged. The mail, while more economical, took more time and was subject to the vagaries of distribution on campus and at the sites. The logistics of this system posed a bottleneck that reduced timely feedback to many students.

The factors of time and the medium of delivery--sometimes alone, often in combination, exerted their influence on the design of distance instruction. Each set limits that challenged teachers' planning.

Rules of Action: Implicit Guides to Planning

The concern for content and the factors of time and the medium, were not the sole determinants of instruction. Faculty also brought to planning their beliefs, attitudes, and concerns about the nature and conduct of instruction. The participants developed a set of guiding principles or implicit rules of action that blended important elements from their own teaching philosophies, styles and experiences with the factors at work in distance planning. The following tacit rules underlaid teachers' planning.

Cover the material. Once unburdened of what to cover, faculty were guided by the directive to "cover the material". The defined content became the instructor's "agenda". Because of "time pressures", adhering to that agenda drove the implementation of instruction.

Following the precept to cover material, the faculty designed instruction that was tightly structured and predominantly lecture. Being structured meant having a clear sense of what the objectives were and where those objectives should lead. Writing an extended syllabus gave the course its structure and provided both faculty and students with the course and session agendas. Preoccupation with covering content lead participants to utilize an expository mode of presentation. "Lecture with some discussion" was the primary instructional method.

The choice to cover the material involved trade-offs. Most faculty members reported that "engaging" students was important to their teaching style, but in reality interaction took a back seat to content as the

participants frequently sacrificed discussion and dialogue to covering the material. But as an English professor told his class that's "the price you pay for distance learning".

Maintain control. Facing barriers to communication and intrusions on their classroom autonomy, faculty were motivated by the need to be in control of the instruction. In planning, one way to maximize one's control was through structure. The teacher determined and controlled the agenda that was tightly centered around content and written in a detailed syllabus. Strategies employed to maintain control resulted in instruction that was teacher-centered and predominantly verbal.

While content was under the faculty's control, the delivery and the physical environment were not. To give themselves more of a sense of control, the participants played it safe and minimized their dependence on the system. They used familiar instructional techniques which, for most, were a combination of lecture and questioning, and they stayed close to the agenda. Playing it safe also meant using familiar instructional media such as the chalkboard, overhead transparencies or an occasional video tape. The visual capabilities of the medium were underutilized; prepared graphics such as slides and computer generated graphics were rarely used. To explore the capabilities of the new medium of delivery was to risk the loss of control to technical difficulties or logistical delays. By minimizing one's dependence on the system, a teacher could exercise some control within a precarious medium of delivery.

Go with the flow. Participants were also influenced in designing instruction by the concept of "the flow of instruction". Flow referred to the natural or "organic" development of instruction that brought together planned activities and spontaneous discussion. Achieving flow depended on the instructor being flexible enough to allow spontaneous deviation from plans, structured enough to know where the instruction should lead, and in control enough to be able to bring digressions back on course. One participant defined it as "a balance that is difficult to keep between allowing students to ask a lot of questions, to engage in a lot of interaction, and, quote 'covering the material'". In going with the flow, the faculty applied flexibility within structure. Having content structured afforded them the opportunity to be responsive and flow with the instruction, but also to bring the direction of instruction back to their set agenda.

Premised on the assumption that instructional interaction flowed naturally, generated by "the quality and interest of the material" and "provocative questions", faculty modeled their plan on that of on-campus instruction where students more readily took a participatory role and dialogue was more spontaneous. In a traditional campus environment, interaction developed rather "organically" because it was not imperative to build in opportunities for interaction and feedback. At a distance, however, and with obstacles to free-wheeling communication, the distance students were frequently less active contributors to or initiators of discussion. Though the faculty desired and encouraged student participation, they did not deliberately plan for interaction. Unplanned, interaction was dependent on skillful on-line questioning and the capricious nature of student participation. As a result, the teacher shouldered the responsibility for nurturing flow.

Assuming that flow would develop naturally often proved counterproductive. Without sufficient interaction and feedback, and in the absence of planned contingencies to stimulate flow, the faculty found themselves less able to "orchestrate the flow of instruction" and more inclined to lecture.

Provide an equitable learning experience.

Participants were also guided by the concern to provide distance students with, as much as possible, the same learning experience as the on-campus students were afforded. Sensitive to impressions among some of their colleagues that distance learning was a "second best system" of instruction, faculty expressed the need to provide for an equal experience. The principle of providing an equitable learning experience translated into doing things the same way.

Concerns for equity reinforced the use of familiar methods and media, and discouraged thinking about distance teaching on its own terms. It was common in comparing contexts for participants to conceptualize distance teaching as an anomaly, referring to classes taught at a distance and their "normal" or "regular" class. The challenge of planning distance instruction was to find ways to pursue the same ends by the same means.

Discussion

Although teaching at a distance prompted subtle differences in style, participants concluded that their approach to instruction remained essentially the same in a distance setting as it was in a more conventional environment. But in process, however, it was the

creation of a unique planning document that distinguished planning for distance instruction from designing its on-campus counterpart.

Developing the extended syllabus was synonymous with planning the distance course, for in its development, the syllabus embodied the decisions faculty made about the shape of instruction. The extended syllabus was, at once, the focal point and manifestation of distance planning. The creation of a detailed syllabus supports Stark's et al. (1988) speculation that syllabus development, in general, "may represent the process of course development in which the teacher has engaged" (p. 17).

The emphasis accorded the development of a detailed syllabus in the present context, strongly suggests its continued evolution and applicability to other settings. While the syllabus took on added significance for these teachers because of a compressed instructional time frame, the development of some type of teaching/learning document is likely to be a major preoccupation of most distance teachers' planning.

While faculty were preoccupied with determining the content to be covered, and matching that content to the time available, their approach to the design of instruction glossed over a number of general design considerations. Factors such as the circumstances under which the instruction would take place, how instruction would be delivered, and the intended learning outcomes received little attention in the faculty's construction of their course of action.

Especially absent from their expressed planning concerns were considerations of the students. That is not to say that faculty failed to take students into account when planning, but the minimal amount of talk about students' needs, interests, and learning attributes suggested that students were a much lower priority in a planning scheme that focused on content. Even more noticeably, the faculty did not talk about adult students, who constituted the greater part of the learner population. The majority of faculty did not acknowledge adults as learners distinct from the more traditional university student. The slighting of adult students resulted not from a conscious, deliberate choice to ignore them, but rather from a lack of awareness of the characteristics and needs of this population, and of the implications for teaching and learning.

Separated by distance and relying principally on audio communication, teachers were challenged to think visually and to maximize interactivity. However, the instruction, as designed by the participants, was not

characterized by either of these attributes. Rather, distance instruction looked much like traditional face-to-face college instruction: it was teacher-centered lecture and assumed a natural emergence of student participation and involvement. Little, if any, content was carried or supplemented graphically; interactive teaching and learning techniques were not the norm. The faculty missed an opportunity to optimally integrate the capabilities of the delivery medium into the instructional design.

When considering the instructional concerns and influences that are represented in the teachers' implicit guides to planning distance instruction, one conclusion stands out above the others. In planning distance instruction, faculty retrofitted rather than redesigned their instruction. That is, the participants did not so much design or plan instruction in consideration of the content, the student characteristics, and the context of instruction as they did adapt or transform instruction that had previously been planned. Redesigning would have called for accommodating the contextual factors and the characteristics of learners by building an instructional plan from the ground up with respect to content and method.

In retrofitting, by contrast, participants made adjustments in style or adaptations in strategies to fit a previously existing course and its methods to a new context. The planning problem became one of making the minimal changes required to fit customary instruction to a different environment.

Retrofitting had the effect of mirroring face-to-face instruction. The faculty began with existing content and an existing course design. They conceded to the constraints of time and the restrictions imposed by the medium and, adjusted instruction as designed for face-to-face presentation to fit the distance context. Changes came about in response to restrictions on customary procedures, rather than in consideration of a changed environment. The strategy of retrofitting amounted to transferring instruction from a face-to-face setting to a distance medium rather than transforming its design.

Of the courses taught at a distance during the present study, all were pre-existing courses, that is, the faculty member had taught the course previously in a traditional campus setting. None were both new to the instructor and new to the distance mode of delivery. Given the time pressures and faced with the novelty of distance teaching, faculty found it both safe and expedient not to change. But what if the

courses had been planned from scratch, specifically to be taught at a distance? Would faculty have designed them differently? The question remains open to speculation.

This discussion does not mean to imply that retrofitting or teachers' customary practices were wrong, and that designing from scratch would be the only way to approach distance instruction. Nor is it to say that instruction was not effective as designed and implemented. The final outcome of instruction may well have been the same. It is, however, the conviction of this researcher that designing distance instruction requires giving full consideration to the elements that have the potential to shape the design. Retrofitting as a design approach can be detrimental. A mind-set for adapting face-to-face instruction hinders faculty in closely reflecting on the course design that best reconciles the content with the students' characteristics and with the assets and liabilities of the medium of delivery. As Knapper (1988) contends, designing distance instruction in terms of its on-campus counterpart is a disservice.

Conclusion

This study looked at the preactive planning of a small group of faculty in one particular distance teaching and learning context. Features of the instructional environment such as the reduced contact hours, the amount of training and instructional support provided to faculty, and the audio-graphic delivery system, restrict the transfer of findings to other distance contexts. However, the findings expand the literature on teachers' thinking by providing additional insight into the little explored area of how college/university faculty plan. But more than that, this description of planning in higher education ventures into two areas not touched upon by previous research. The present study inaugurates research on planning in non-traditional settings with non-traditional learners.

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